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*Sept. 1st.*

The President, DR. HAYS, in the Chair.

Twenty-two members present.

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*Sept. 8th.*

The President, DR. HAYS, in the Chair.

Twenty-eight members present.

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*Sept. 15th.*

The President, DR. HAYS, in the Chair.

Twenty-eight members present.

The following papers were presented for publication :

Extinct Mammalia of Dakota and Nebraska, including an account of some allied forms from other localities, together with a synopsis of the Mammalian Remains of North America. Illustrated by twenty-eight plates. By Joseph Leidy, M. D. Preceded by an introduction on the Geology of the Tertiary Formations of Dakota and Nebraska, accompanied by a Map. By F. V. Hayden, M. D.

Notice of American Species of *Ptychodus*. By Joseph Leidy, M. D.

Synopsis of the Extinct *Batrachia* of North America. By Edw. D. Cope.

Dr. Leidy read a letter from Mr. B. Waterhouse Hawkins, proposing to erect in the Museum, at his own expense, the fossil remains of the *Hadrosaurus* to their natural relations in the figure of that great Dinosaur, in accordance with Dr. Leidy's descriptions in his Monograph of the Cretaceous Reptiles of the United States.

On leave being granted, the following resolutions, offered by Dr. J. L. LeConte, were adopted :

That the Academy accept the proposition of Mr. B. Waterhouse Hawkins, to erect in this Hall, at his own expense, a restoration of the skeleton *Hadrosaurus*.

That the thanks of the Academy be respectfully tendered to Mr. Hawkins for his liberal offer, and that the Curators be instructed to furnish to him every facility in the use of specimens in the Museum, which the most liberal interpretation of the By-Laws will permit.

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*Sept. 22d.*

DR. BRIDGES, in the Chair.

Twenty-four members present.

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*Sept. 29th.*

The President, DR. HAYS, in the Chair.

Twenty-four members present.

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Dr. D. G. Brinton was elected a member.

On favorable report of the Committee, the paper of Dr. Leidy, presented Sept. 15th, entitled "Extinct Mammalia of Dakota and Nebraska," etc., reported in favor of its publication in the Journal.

On favorable report of the Committees, the following papers were ordered to be printed:

**Notice of American Species of PTYCHODUS.**

BY JOSEPH LEIDY, M. D.

The Cestracient genus of fishes *Ptychodus*, so far as known, is confined to the Cretaceous Formations. Remains, consisting of teeth, I have had the opportunity of inspecting from Alabama, Mississippi and Kansas, and although reported to exist in the Cretaceous Formation of Delaware, I have not met with them from that locality nor from the Green Sand, of corresponding age, of New Jersey. The following list comprises all the specimens of American *Ptychodus* teeth I have had the opportunity of examining.

**PTYCHODUS MORTONI.**

Agassiz, Poissons Fossiles III. (1833-43), 158, Tab. 25, figs. 1-3; copied in figs. 773, 773a, of Dana's Manual of Geology.

Palate bone of a fish? Morton: Syn. Org. Rem. Cret. Group. (1834), pl. xviii, figs. 1, 2.

The teeth of *Ptychodus Mortoni* I have seen only from the cretaceous formation of Alabama and Mississippi. Morton, in the work above noticed, figures a tooth, but does not mention the locality from which it was obtained.

Agassiz, in his Poissons Fossiles, gives a good representation of a tooth of this species, from the Green Sand of America, in three views, figs. 1-3, Tab. 25.

Dixon, in his Geology of Sussex, represents two small teeth, (figs. 6, 7, pl. xxi), which he refers to the same species. Though exhibiting some resemblance in character to the American teeth, I think a further comparison is necessary to establish their specific identity.

The teeth of *Ptychodus Mortoni* are well defined in character, and in comparison with teeth of well recognized European species are almost generic in their peculiarity. Though exhibiting some variety, their likeness presents a distinct specific uniformity. Their size of course varies greatly with age and the relative position they occupied with one another in the mouth of the fish.

Viewed from above, the crown is reniform in outline, the long diameter being transverse; the incurvature posterior. The crown rises in the form of a cone with a more or less obtuse summit. The sides of the crown slope to the base and frequently more or less abruptly expand, laterally approaching the latter. The back part is occupied by a wide triangular sinus for the reception of the fore-part of the crown of the tooth which was situated in front of it when the teeth were contained within the mouth. The border of the crown is thick and rounded and dips beneath. At the sinus it is prominent. The summit of the crown presents a prominent crucial ridge, more or less distinct in different specimens. From the cross numerous ridges of about the same thickness diverge upon the sides of the cone, branching in their course, multiplying and becoming finer, and ultimately conjoining upon the base in a fine reticulation extending to the borders of the crown. The coarser ridges vary in their proportionate length in different specimens. The reticulation of the base is most extensive laterally, occupying usually half the breadth of the space between the summit and border. It also occupies the sinus, and is least developed at the fore-part of the crown. The width of the crown approaches double the 1868.]